RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 08/485,943B

Source: JFW16

Date Processed by STIC: 10/11/2005

ENTERED

CREPrors Edited by the STIG Systems Branch

ial N	Number:	08/4	.85 _. 943 _{.13}		CRF Edit		10/11/2 DA
		ucleic acid/a ed" to the no	amino acid nun ext line	nbers/text	in cases w	where th	ne sequenc
_ •	Corrected t	he SEQ ID N	NO. Sequence	numbers e	dited were	e:	
_	Inserted or NO's edite		nucleic numbe	r at the en	d of a nucl	leic line	. SEQ ID
_	Deleted:	_ invalid beg	ginning/end-of-	-file text ;	page n	number	s
_	Inserted ma	ndatory hea	dings/numeric	identifier	s, specifica	ılly:	·
_	Moved resp	onses to sam	ne line as headi	ng/numeri	c identifie	r, speci	fically:
- - - -	Other:	Preclé	- Se Tolent	g T	D 99	7 f	1

Revised 09/09/2003



IFW16

RAW SEQUENCE LISTING DATE: 10/11/2005 PATENT APPLICATION: US/08/485,943B TIME: 14:25:33

Input Set : A:\PTO.da.txt

```
SEQUENCE LISTING
      4 (1) GENERAL INFORMATION:
      6
             (i) APPLICANT: THE ROCKEFELLER UNIVERSITY
      8
            (ii) TITLE OF INVENTION: MODULATORS OF BODY WEIGHT, CORRESPONDING NUCLEIC
      9
                                      ACIDS AND PROTEINS, AND DIAGNOSTIC AND THERAPEUTIC USES
THEREOF
           (iii) NUMBER OF SEQUENCES: 100
     11
            (iv) CORRESPONDENCE ADDRESS:
     13
     14
                   (A) ADDRESSEE: Klauber & Jackson
     15
                   (B) STREET: 411 Hackensack Avenue
     16
                   (C) CITY: Hackensack
     17
                   (D) STATE: New Jersey
     18
                   (E) COUNTRY: USA
     19
                   (F) ZIP: 07601
             (v) COMPUTER READABLE FORM:
     21
     22
                   (A) MEDIUM TYPE: Floppy disk
     23
                   (B) COMPUTER: IBM PC compatible
     24
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     25
                   (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
     27
            (vi) CURRENT APPLICATION DATA:
C--> 28
                  (A) APPLICATION NUMBER: US/08/485,943B
C--> 29
                  (B) FILING DATE: 07-Jun-1995
W--> 45
                  (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     42
                  (A) APPLICATION NUMBER: 08/438,431
     33
     34
                  (B) FILING DATE: May 10, 1995
     38
                  (A) APPLICATION NUMBER: 08/347,563
     39
                  (B) FILING DATE: November 30, 1994
     43
                  (A) APPLICATION NUMBER: 08/292,345
     44
                  (B) FILING DATE: August 17, 1994
     47
          (viii) ATTORNEY/AGENT INFORMATION:
                  (A) NAME: Jackson Esq., David A.
     48
     49
                  (B) REGISTRATION NUMBER: 26,742
     50
                  (C) REFERENCE/DOCKET NUMBER: 600-1-087 CIP2I
     52
            (ix) TELECOMMUNICATION INFORMATION:
     53
                  (A) TELEPHONE: 201 487-5800
     54
                  (B) TELEFAX: 201 343-1684
    55
                  (C) TELEX: 133521
     57
       (2) INFORMATION FOR SEQ ID NO: 1:
     59
             (i) SEQUENCE CHARACTERISTICS:
    60
                  (A) LENGTH: 2793 base pairs
     61
                  (B) TYPE: nucleic acid
     62
                  (C) STRANDEDNESS: double
                  (D) TOPOLOGY: linear
     63
```

Input Set : A:\PTO.da.txt

65 (ii) MOLECULE TYPE: DNA (genomic) 66 (A) DESCRIPTION: Murine ob cDNA													
O (iv) ANTI-SENSE: NO													
72 (vi) ORIGINAL SOURCE:													
73 (A) ORGANISM: Murine													
75 (ix) FEATURE:													
76 (A) NAME/KEY: CDS 77 (B) LOCATION: 57560													
80 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:	NECCONCCC NCCNNN EC												
82 GGATCCCTGC TCCAGCAGCT GCAAGGTGCA AGAAGAAGAA GA 84 ATG TGC TGG AGA CCC CTG TGT CGG TTC CTG TGG CT													
85 Met Cys Trp Arg Pro Leu Cys Arg Phe Leu Trp Le 86 1 5 10	ed lip ser lyr Leu 15												
88 TCT TAT GTT CAA GCA GTG CCT ATC CAG AAA GTC CA													
89 Ser Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gl 90 20 25	30												
92 ACC CTC ATC AAG ACC ATT GTC ACC AGG ATC AAT GA													
93 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn As 94 35 40	45												
96 CAG TCG GTA TCC GCC AAG CAG AGG GTC ACT GGC T													
97 Gln Ser Val Ser Ala Lys Gln Arg Val Thr Gly Le													
	60												
100 GGG CTT CAC CCC ATT CTG AGT TTG TCC AAG ATG													
101 Gly Leu His Pro Ile Leu Ser Leu Ser Lys Met A													
102 65 70 75	ASP GIN INI Det Ala 80												
104 GTC TAT CAA CAG GTC CTC ACC AGC CTG CCT TCC C													
105 Val Tyr Gln Gln Val Leu Thr Ser Leu Pro Ser (
106 85 90	95												
108 ATA GCC AAT GAC CTG GAG AAT CTC CGA GAC CTC (
109 Ile Ala Asn Asp Leu Glu Asn Leu Arg Asp Leu I													
110 100 105	110												
112 TTC TCC AAG AGC TGC TCC CTG CCT CAG ACC AGT (
113 Phe Ser Lys Ser Cys Ser Leu Pro Gln Thr Ser (
114 115 120	125												
116 GAG AGC CTG GAT GGC GTC CTG GAA GCC TCA CTC													
117 Glu Ser Leu Asp Gly Val Leu Glu Ala Ser Leu S													
	140												
120 GTG GCT TTG AGC AGG CTG CAG GGC TCT CTG CAG	GAC ATT CTT CAA CAG 536												
121 Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln A													
122 145 150 155	160												
124 TTG GAT GTT AGC CCT GAA TGC TGA AGTTTCAAAG GO	CCACCAGGC TCCCAAGA 588												
125 Leu Asp Val Ser Pro Glu Cys *													
126 165													
128 ATCATGTAGA GGGAAGAAAC CTTGGCTTCC AGGGGTCTTC A	AGGAGAAGAG AGCCATGTGC 648												
130 ACACATCCAT CATTCATTTC TCTCCCTCCT GTAGACCACC (CATCCAAAGG CATGACTCCA 708												
132 CAATGCTTGA CTCAAGTTAT CCACACAACT TCATGAGCAC													
134 AGGGGACTCT CACCTAGTTC TTCAGCAAGT AGAGATAAGA	GCCATCCCAT CCCCTCCATG 828												
136 TCCCACCTGC TCCGGGTACA TGTTCCTCCG TGGGTACACG													

Input Set : A:\PTO.da.txt

```
138 GGTGAGGTAG GGATGGGTAG AGCCTTTGGG CTGTCTCAGA GTCTTTGGGA GCACCGTGAA
                                                                           948
140 GGCTGCATCC ACACACAGCT GGAAACTCCC AAGCAGCACA CGATGGAAGC ACTTATTTAT
                                                                          1008
142 TTATTCTGCA TTCTATTTTG GATGGATCTG AAGCAAGGCA TCAGCTTTTT CAGGCTTTGG
                                                                          1068
144 GGGTCAGCCA GGATGAGGAA GGCTCCTGGG GTGCTGCTTT CAATCCTATT GATGGGTCTG
                                                                          1128
146 CCCGAGGCAA ACCTAATTTT TGAGTGACTG GAAGGAAGGT TGGGATCTTC CAAACAAGAG
                                                                          1188
148 TCTATGCAGG TAGCGCTCAA GATTGACCTC TGGTGACTGG TTTTGTTTCT ATTGTGACTG
                                                                          1248
150 ACTCTATCCA AACACGTTTG CAGCGGCATT GCCGGGAGCA TAGGCTAGGT TATTATCAAA
                                                                          1308
152 AGCAGATGAA TTTTGTCAAG TGTAATATGT ATCTATGTGC ACCTGAGGGT AGAGGATGTG
                                                                          1368
154 TTAGAGGGAG GGTGAAGGAT CCGGAAGTGT TCTCTGAATT ACATATGTGT GGTAGGCTTT
156 TCTGAAAGGG TGAGGCATTT TCTTACCTCT GTGGCCACAT AGTGTGGCTT TGTGAAAAGG
                                                                          1488
158 ACAAAGGAGT TGACTCTTTC CGGAACATTT GGAGTGTACC AGGCACCCTT GGAGGGGCTA
                                                                          1548
160 AAGCTACAGG CCTTTTGTTG GCATATTGCT GAGCTCAGGG AGTGAGGGCC CCACATTTGA
                                                                          1608
162 GACAGTGAGC CCCAAGAAAA GGGTCCCTGG TGTAGATCTC CAAGGTTGTC CAGGGTTGAT
                                                                          1668
164 CTCACAATGC GTTTCTTAAG CAGGTAGACG TTTGCATGCC AATATGTGGT TCTCATCTGA
                                                                          1728
166 TTGGTTCATC CAAAGTAGAA CCCTGTCTCC CACCCATTCT GTGGGGAGTT TTGTTCCAGT
                                                                          1788
168 GGGAATGAGA AATCACTTAG CAGATGGTCC TGAGCCCTGG GCCAGCACTG CTGAGGAAGT
                                                                          1848
170 GCCAGGGCCC CAGGCCAGGC TGCCAGAATT GCCCTTCGGG CTGGAGGATG AACAAAGGGG
                                                                          1908
172 CTTGGGTTTT TCCATCACCC CTGCACCCTA TGTCACCATC AAACTGGGGG GCAGATCAGT
                                                                          1968
174 GAGAGGACAC TTGATGGAAA GCAATACACT TTAAGACTGA GCACAGTTTC GTGCTCAGCT
                                                                          2028
176 CTGTCTGGTG CTGTGAGCTA GAGAAGCTCA CCACATACAT ATAAAAATCA GAGGCTCATG
                                                                          2088
178 TCCCTGTGGT TAGACCCTAC TCGCGGCGGT GTACTCCACC ACAGCAGCAC CGCACCGCTG
                                                                          2148
180 GAAGTACAGT GCTGTCTTCA ACAGGTGTGA AAGAACCTGA GCTGAGGGTG ACAGTGCCCA
                                                                          2208
182 GGGGAACCCT GCTTGCAGTC TATTGCATTT ACATACCGCA TTTCAGGGCA CATTAGCATC
                                                                          2268
184 CACTCCTATG GTAGCACACT GTTGACAATA GGACAAGGGA TAGGGGTTGA CTATCCCTTA
186 TCCAAAATGC TTGGGACTAG AAGAGTTTTG GATTTTAGAG TCTTTTCAGG CATAGGTATA
                                                                          2388
188 TTTGAGTATA TATAAAATGA GATATCTTGG GGATGGGGCC CAAGTATAAA CATGAAGTTC
                                                                          2448
190 ATTTATATTT CATAATACCG TATAGACACT GCTTGAAGTG TAGTTTTATA CAGTGTTTTA
                                                                          2508
192 AATAACGTTG TATGCATGAA AGACGTTTTT ACAGCATGAA CCTGTCTACT CATGCCAGCA
                                                                          2568
194 CTCAAAAACC TTGGGGTTTT GGAGCAGTTT GGATCTTGGG TTTTCTGTTA AGAGATGGTT
                                                                          2628
196 AGCTTATACC TAAAACCATA ATGGCAAACA GGCTGCAGGA CCAGACTGGA TCCTCAGCCC
                                                                          2688
198 TGAAGTGTGC CCTTCCAGCC AGGTCATACC CTGTGGAGGT GAGCGGGATC AGGTTTTGTG
                                                                          2748
200 GTGCTAAGAG AGGAGTTGGA GGTAGATTTT GGAGGATCTG AGGGC
                                                                          2793
203 (2) INFORMATION FOR SEQ ID NO: 2:
205
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 167 amino acids
206
207
              (B) TYPE: amino acid
208
              (D) TOPOLOGY: linear
210
        (ii) MOLECULE TYPE: protein
211
              (A) DESCRIPTION: Murine ob polypeptide
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
215 Met Cys Trp Arg Pro Leu Cys Arg Phe Leu Trp Leu Trp Ser Tyr Leu
216
     1
                      5
                                         10
                                                              15
218 Ser Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
219
                20
221 Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
222
            35
                                 40
224 Gln Ser Val Ser Ala Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
                             55
227 Gly Leu His Pro Ile Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala
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Input Set : A:\PTO.da.txt

228	65					70					75					80	
230	Val	Tyr	Gln	Gln	Val	Leu	Thr	Ser	Leu	Pro	Ser	Gln	Asn	Val	Leu	Gln	
231		_			85					90					95		
233	Ile	Ala	Asn	Asp	Leu	Glu	Asn	Leu	Arq	Asp	Leu	Leu	His	Leu	Leu	Ala	
234				100					105	-				110			
236	Phe	Ser	Lvs	Ser	Cvs	Ser	Leu	Pro		Thr	Ser	Glv	Leu	Gln	Lvs	Pro	
237			115		-2-			120				1	125		-1-		
	Glu	Ser		Asp	Glv	Val	Len	Glu	Ala	Ser	Len	Tvr		Thr	Glu	Val	
240		130		1101	0 -1		135	0_0				140					
	Va1		T.011	Ser	Δra	T.011		Gly	Ser	T.011	Gln		Tla	T.011	Gln.	Gln	
	145	nia	DCu	JCI	m-9	150	0111	CIY	DCI	шси	155	тор	110	пси	0111	160	
		λen	Wa l	Sor	Pro	Glu	Cve				133					100	
246	шец	тэр	vai	Der	165	Gru	Cys										
	(2)	TME	ישמטר	TIT () NT		CEO.	TD 1	TO - 3									
	(2)							NO: 3									
251		(1		-				ISTIC		_							
252								ase p		3							
253								acio									
254			:					douk	ore								
255			•			OGY:											
257		(11				YPE:						_	_				
258								Humar	ı ob	CDN	A whe	ere 1	v rep	prese	ents	any	nucleotide
260						AL: 1	10										
262					ENSE												
264		(vi				DURCI											
265						ISM:	Huma	an									
267		(ix	FE2														
268						KEY:											
269			(I	3) L(CAT:	ON:	46.	.546									
272				-				ON: S	_								
	NNN	GNNG'	rtg (CAAG	GCCC2	AA GA	AAGC	CCAN	1 NT	CCTG	GAA	GGA	AA A	rg cz	T TA	3G	54
275		74 NNNGNNGTTG CAAGGCCCAA GAAGCCCANN NTCCTGGGAA GGAAA ATG CAT TGG 5 75 Met His Trp															
276													Me		ıs Tı	ср	
278														1		-	
								TGG					CTT	1 TTC	TAT	GTC	102
								TGG Trp					CTT	1 TTC	TAT	GTC	102
279 280	Gly	Thr 5	Leu	Cys	Gly	Phe	Leu 10	Trp	Leu	Trp	Pro	Tyr 15	CTT Leu	1 TTC Phe	TAT Tyr	GTC Val	102
279 280	Gly	Thr 5	Leu	Cys	Gly	Phe	Leu 10		Leu	Trp	Pro	Tyr 15	CTT Leu	1 TTC Phe	TAT Tyr	GTC Val	102 150
279 280 282	Gly CAA	Thr 5 GCT	Leu GTG	Cys CCC	Gly ATC	Phe CAA	Leu 10 AAA	Trp	Leu CAA	Trp GAT	Pro GAC	Tyr 15 ACC	CTT Leu AAA	1 TTC Phe ACC	TAT Tyr CTC	GTC Val	
279 280 282	Gly CAA	Thr 5 GCT	Leu GTG	Cys CCC	Gly ATC	Phe CAA	Leu 10 AAA	Trp GTC	Leu CAA	Trp GAT	Pro GAC	Tyr 15 ACC	CTT Leu AAA	1 TTC Phe ACC	TAT Tyr CTC	GTC Val	
279 280 282 283 284 286	Gly CAA Gln 20 AAG	Thr 5 GCT Ala ACA	Leu GTG Val ATT	Cys CCC Pro GTC	Gly ATC Ile ACC	Phe CAA Gln 25 AGG	Leu 10 AAA Lys ATC	Trp GTC Val AAT	Leu CAA Gln GAC	Trp GAT Asp ATT	Pro GAC Asp 30 TCA	Tyr 15 ACC Thr	CTT Leu AAA Lys ACG	1 TTC Phe ACC Thr	TAT Tyr CTC Leu TCA	GTC Val ATC Ile 35 GTC	
279 280 282 283 284 286	Gly CAA Gln 20 AAG	Thr 5 GCT Ala ACA	Leu GTG Val ATT	Cys CCC Pro GTC	Gly ATC Ile ACC	Phe CAA Gln 25 AGG	Leu 10 AAA Lys ATC	Trp GTC Val	Leu CAA Gln GAC	Trp GAT Asp ATT	Pro GAC Asp 30 TCA	Tyr 15 ACC Thr	CTT Leu AAA Lys ACG	1 TTC Phe ACC Thr	TAT Tyr CTC Leu TCA	GTC Val ATC Ile 35 GTC	150
279 280 282 283 284 286	Gly CAA Gln 20 AAG	Thr 5 GCT Ala ACA	Leu GTG Val ATT	Cys CCC Pro GTC	Gly ATC Ile ACC	Phe CAA Gln 25 AGG	Leu 10 AAA Lys ATC	Trp GTC Val AAT	Leu CAA Gln GAC	Trp GAT Asp ATT	Pro GAC Asp 30 TCA	Tyr 15 ACC Thr	CTT Leu AAA Lys ACG	1 TTC Phe ACC Thr	TAT Tyr CTC Leu TCA	GTC Val ATC Ile 35 GTC	150
279 280 282 283 284 286 287 288	Gly CAA Gln 20 AAG Lys	Thr 5 GCT Ala ACA Thr	Leu GTG Val ATT Ile	Cys CCC Pro GTC Val	Gly ATC Ile ACC Thr 40	Phe CAA Gln 25 AGG Arg	Leu 10 AAA Lys ATC Ile	Trp GTC Val AAT	Leu CAA Gln GAC Asp	Trp GAT Asp ATT Ile 45	GAC Asp 30 TCA Ser	Tyr 15 ACC Thr CAC His	CTT Leu AAA Lys ACG Thr	1 TTC Phe ACC Thr CAG Gln	TAT Tyr CTC Leu TCA Ser 50	GTC Val ATC Ile 35 GTC Val	150
279 280 282 283 284 286 287 288 290	CAA Gln 20 AAG Lys	Thr 5 GCT Ala ACA Thr	Leu GTG Val ATT Ile	Cys CCC Pro GTC Val	Gly ATC Ile ACC Thr 40 AAA	Phe CAA Gln 25 AGG Arg	Leu 10 AAA Lys ATC Ile ACC	Trp GTC Val AAT Asn	CAA Gln GAC Asp	GAT Asp ATT Ile 45 GAC	GAC Asp 30 TCA Ser	Tyr 15 ACC Thr CAC His	CTT Leu AAA Lys ACG Thr	1 TTC Phe ACC Thr CAG Gln	TAT Tyr CTC Leu TCA Ser 50 CTC	GTC Val ATC Ile 35 GTC Val	150
279 280 282 283 284 286 287 288 290	CAA Gln 20 AAG Lys	Thr 5 GCT Ala ACA Thr	Leu GTG Val ATT Ile	Cys CCC Pro GTC Val	Gly ATC Ile ACC Thr 40 AAA	Phe CAA Gln 25 AGG Arg	Leu 10 AAA Lys ATC Ile ACC	Trp GTC Val AAT Asn GGT	CAA Gln GAC Asp	GAT Asp ATT Ile 45 GAC	GAC Asp 30 TCA Ser	Tyr 15 ACC Thr CAC His	CTT Leu AAA Lys ACG Thr	1 TTC Phe ACC Thr CAG Gln	TAT Tyr CTC Leu TCA Ser 50 CTC	GTC Val ATC Ile 35 GTC Val	150
279 280 282 283 284 286 287 288 290 291 292	CAA Gln 20 AAG Lys TCC Ser	Thr 5 GCT Ala ACA Thr TCC Ser	Leu GTG Val ATT Ile AAA Lys	Cys CCC Pro GTC Val CAG Gln 55	Gly ATC Ile ACC Thr 40 AAA Lys	Phe CAA Gln 25 AGG Arg GTC Val	Leu 10 AAA Lys ATC Ile ACC Thr	Trp GTC Val AAT Asn GGT	CAA Gln GAC Asp TTG Leu 60	GAT Asp ATT Ile 45 GAC Asp	GAC Asp 30 TCA Ser TTC Phe	Tyr 15 ACC Thr CAC His	CTT Leu AAA Lys ACG Thr CCT Pro	1 TTC Phe ACC Thr CAG Gln GGG Gly 65	TAT Tyr CTC Leu TCA Ser 50 CTC Leu	GTC Val ATC Ile 35 GTC Val CAC	150
279 280 282 283 284 286 287 288 290 291 292 294	CAA Gln 20 AAG Lys TCC Ser	Thr 5 GCT Ala ACA Thr TCC Ser ATC	Leu GTG Val ATT Ile AAA Lys CTG	Cys CCC Pro GTC Val CAG Gln 55 ACC	Gly ATC Ile ACC Thr 40 AAA Lys	Phe CAA Gln 25 AGG Arg GTC Val	Leu 10 AAA Lys ATC Ile ACC Thr	Trp GTC Val AAT Asn GGT Gly	CAA Gln GAC Asp TTG Leu 60 GAC	GAT Asp ATT 11e 45 GAC Asp	GAC Asp 30 TCA Ser TTC Phe	Tyr 15 ACC Thr CAC His ATT Ile	CTT Leu AAA Lys ACG Thr CCT Pro	TTC Phe ACC Thr CAG Gln GGG Gly 65 GTC	TAT Tyr CTC Leu TCA Ser 50 CTC Leu	GTC Val ATC Ile 35 GTC Val CAC His	150 198 246
279 280 282 283 284 286 287 288 290 291 292 294	CAA Gln 20 AAG Lys TCC Ser	Thr 5 GCT Ala ACA Thr TCC Ser ATC	Leu GTG Val ATT Ile AAA Lys	Cys CCC Pro GTC Val CAG Gln 55 ACC	Gly ATC Ile ACC Thr 40 AAA Lys	Phe CAA Gln 25 AGG Arg GTC Val	Leu 10 AAA Lys ATC Ile ACC Thr	Trp GTC Val AAT Asn GGT Gly ATG	CAA Gln GAC Asp TTG Leu 60 GAC	GAT Asp ATT 11e 45 GAC Asp	GAC Asp 30 TCA Ser TTC Phe	Tyr 15 ACC Thr CAC His ATT Ile	CTT Leu AAA Lys ACG Thr CCT Pro	TTC Phe ACC Thr CAG Gln GGG Gly 65 GTC	TAT Tyr CTC Leu TCA Ser 50 CTC Leu	GTC Val ATC Ile 35 GTC Val CAC His	150 198 246
279 280 282 283 284 286 287 288 290 291 292 294 295 296	CAA Gln 20 AAG Lys TCC Ser CCC Pro	Thr 5 GCT Ala ACA Thr TCC Ser ATC Ile	GTG Val ATT Ile AAA Lys CTG Leu 70	Cys CCC Pro GTC Val CAG Gln 55 ACC Thr	Gly ATC Ile ACC Thr 40 AAA Lys TTA Leu	Phe CAA Gln 25 AGG Arg GTC Val TCC Ser	Leu 10 AAA Lys ATC Ile ACC Thr	GTC Val AAT Asn GGT Gly ATG Met 75	CAA Gln GAC Asp TTG Leu 60 GAC Asp	GAT Asp ATT Ile 45 GAC Asp CAG Gln	GAC Asp 30 TCA Ser TTC Phe	Tyr 15 ACC Thr CAC His ATT Ile CTG Leu	CTT Leu AAA Lys ACG Thr CCT Pro GCA Ala 80	TTC Phe ACC Thr CAG Gln GGG Gly 65 GTC Val	TAT Tyr CTC Leu TCA Ser 50 CTC Leu TAC Tyr	GTC Val ATC Ile 35 GTC Val CAC His	150 198 246
279 280 282 283 284 286 287 288 290 291 292 294 295 296 298	CAA Gln 20 AAG Lys TCC Ser CCC Pro	Thr 5 GCT Ala ACA Thr TCC Ser ATC Ile	Leu GTG Val ATT Ile AAA Lys CTG Leu 70 CTC	Cys CCC Pro GTC Val CAG Gln 55 ACC Thr	Gly ATC Ile ACC Thr 40 AAA Lys TTA Leu AGT	Phe CAA Gln 25 AGG Arg GTC Val TCC Ser	Leu 10 AAA Lys ATC Ile ACC Thr AAG Lys CCT	GTC Val AAT Asn GGT Gly ATG Met	CAA Gln GAC Asp TTG Leu 60 GAC Asp	GAT Asp ATT Ile 45 GAC Asp CAG Gln	GAC Asp 30 TCA Ser TTC Phe ACA Thr	Tyr 15 ACC Thr CAC His ATT Ile CTG Leu	CTT Leu AAA Lys ACG Thr CCT Pro GCA Ala 80 CAA	TTC Phe ACC Thr CAG Gln GGG Gly 65 GTC Val	TAT Tyr CTC Leu TCA Ser 50 CTC Leu TAC Tyr	GTC Val ATC Ile 35 GTC Val CAC His CAA Gln	150 198 246 294

Input Set : A:\PTO.da.txt

300		85					90					95					
	GAC		GAG	AAC	CTC	CGG		CTT	CTT	CAC	GTG		GCC	TTC	TCT	AAG	390
	Asp																
304	100					105	_				110					115	
306	AGC	TGC	CAC	TTG	CCC	TGG	GCC	AGT	GGC	CTG	GAG	ACC	\mathtt{TTG}	GAC	AGC	CTG	438
307	Ser	Cys	His	Leu	Pro	Trp	Ala	Ser	Gly	Leu	Glu	Thr	Leu	Asp	Ser	Leu	
308					120					125					130		
	GGG																486
311	Gly	Gly	Val	Leu	Glu	Ala	Ser	Gly	Tyr	Ser	Thr	Glu	Val	Val	Ala	Leu	
312				135					140					145			
	AGC																534
	Ser	Arg		Gln	Gly	Ser	Leu		Asp	Met	Leu	Trp		Leu	Asp	Leu	
316			150					155					160				
	AGC				TGA	GCC'	IT GA	AAGG'	rcac'	r cr	rccr	3CAA	GGA	CTNA	CGT		585
	Ser		GIY	Cys													
320		165		A A CITTLE	2000	nm m/	7070	7 m 7 m/	7 ma	33.00	A MIMO	7701		mma /	אמות ב	72.02.00	C 4 E
	CCT															GACACC	645
	(2)									LCIC.	LAAG	CCAC	LICI.	ICC Z	WHG(3	700
327		(i)															
330		(1 /					57 ar			de.							
331				•					uci	20							
332	···																
334		(ii)															
335	• •																
337	37 (vi) ORIGINAL SOURCE:																
339		(xi)	SE	QUEN	CE DI	ESCR:	IPTIC	ON: S	SEQ :	ID NO	0: 4:	:					
341	Met	His	Trp	Gly	Thr	Leu	Cys	Gly	Phe	Leu	Trp	Leu	${\tt Trp}$	Pro	Tyr	Leu	
342					5					10					15		
344	Phe	Tyr	Val	Gln	Ala	Val	Pro	Ile	Gln	Lys	Val	Gln	Asp	Asp	Thr	Lys	
345			_	20	_	_	_	_	25	_				30			
	Thr	Leu		Lys	Thr	Ile	Val		Arg	Ile	Asn	Asp		Ser	His	Thr	
348		.	35				~ 1	40	7		~7		45	- 1	-1-	D	
	Gln		vaı	ser	ser	ьys		ьуѕ	vaı	Thr	GIY		Asp	Pne	11e	Pro	
351	Gly	50	uia	Dro	т10	T 011	55 ™h~	T 011	C02	T 770	Mot	00	Cln	Th.	Tou	77-	
354	_	ьеu	птъ	PIO	116	70	TIIL	пеп	ser	пур	75	Asp	GIII	TIII	пеп	80	
	Val	Tur	Gln	Gln	Tla		Thr	Ser	Met	Pro		Δra	Aen	Val	Tle		
357		- y -	0111	OIII	85	Deu	1111	DCI	ricc	90	DCI	nr 9	ASII	vai	95	GIII	
	Ile	Ser	Asn	Asp		Glu	Asn	Len	Ara		Len	Len	His	Val		Ala	
360				100					105					110			
	Phe	Ser	Lvs		Cvs	His	Leu	Pro		Ala	Ser	Glv	Leu		Thr	Leu	
364			115		4			120	- E			- 4	125	- 			
	Asp	Ser		Gly	Gly	Val	Leu		Ala	Ser	Gly	Tyr		Thr	Glu	Val	
368	_	130		-	-		135				-	140					
370	Val	Ala	Leu	Ser	Arg	Leu	Gln	Gly	Ser	Leu	Gln	Asp	Met	Leu	Trp	Gln	
	145				='	150					155					160	
374	Leu	Asp	Leu	Ser	Pro	Gly	Cys										
375					165												

VERIFICATION SUMMARY PATENT APPLICATION: US/08/485,943B DATE: 10/11/2005 TIME: 14:25:34

Input Set : A:\PTO.da.txt

```
L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:35 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:40 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:45 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:436 M:220 C: Keyword misspelled or invalid format, [(A) DESCRIPTION:]
L:509 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:529 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:571 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:651 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:673 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:695 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:717 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:830 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=21
L:1128 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29
L:1148 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30
L:1170 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:1192 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:1214 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33
L:1234 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:1255 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35
L:1276 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36
L:1297 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37
L:1339 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39
L:1362 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=40
L:1385 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=41
L:1407 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=42 L:1430 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43
L:1453 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=44
L:1474 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=45
L:1496 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SegNo=46
L:1519 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47
L:1541 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=48
L:1564 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=49
L:1587 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=50
L:1610 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=51
L:1633 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=52
L:1655 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=53
L:1678 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=54
L:1701 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=55
L:1724 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=56
L:1747 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=57 L:1770 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=58
L:1793 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=59
L:1816 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=60
L:1839 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=61
L:1862 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=62
L:1885 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=63
```

VERIFICATION SUMMARY DATE: 10/11/2005 PATENT APPLICATION: US/08/485,943B TIME: 14:25:34

Input Set : A:\PTO.da.txt

```
L:1907 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=64
L:1930 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=65
L:1953 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=66
L:1977 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=67
L:2000 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=68
L:2021 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=69
L:2044 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=70
L:2067 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=71
L:2090 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=72
L:2113 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=73
L:2136 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=73
```

Raw Sequence Listing before editing, for reference only



IFW16

DATE: 10/05/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/08/485,943B TIME: 11:48:22

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10052005\H485943B.raw

```
SEQUENCE LISTING
        (1) GENERAL INFORMATION:
      6
             (i) APPLICANT: THE ROCKEFELLER UNIVERSITY
            (ii) TITLE OF INVENTION: MODULATORS OF BODY WEIGHT, CORRESPONDING NUCLEIC
      8
      9
                                      ACIDS AND PROTEINS, AND DIAGNOSTIC AND THERAPEUTIC USES
THEREOF
           (iii) NUMBER OF SEQUENCES: 100
     11
                                                               Does Not Comply
Corrected Diskette Needed
     13
            (iv) CORRESPONDENCE ADDRESS:
                   (A) ADDRESSEE: Klauber & Jackson
     14
                   (B) STREET: 411 Hackensack Avenue
     15
                   (C) CITY: Hackensack
     16
     17
                  (D) STATE: New Jersey
                   (E) COUNTRY: USA
     18
                   (F) ZIP: 07601
     19
     21
             (v) COMPUTER READABLE FORM:
     22
                   (A) MEDIUM TYPE: Floppy disk
                   (B) COMPUTER: IBM PC compatible
     23
                   (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     24
                   (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
     25
     27
            (vi) CURRENT APPLICATION DATA:
C--> 28
                   (A) APPLICATION NUMBER: US/08/485,943B
C--> 29
                   (B) FILING DATE: 07-Jun-1995
W - - > 45
                   (C) CLASSIFICATION:
     42
           (vii) PRIOR APPLICATION DATA:
     33
                   (A) APPLICATION NUMBER: 08/438,431
     34
                   (B) FILING DATE: May 10, 1995
                   (A) APPLICATION NUMBER: 08/347,563
     38
     39
                   (B) FILING DATE: November 30, 1994
                   (A) APPLICATION NUMBER: 08/292,345
     43
                   (B) FILING DATE: August 17, 1994
     44
          (viii) ATTORNEY/AGENT INFORMATION:
     47
                   (A) NAME: Jackson Esq., David A.
     49
                   (B) REGISTRATION NUMBER: 26,742
                   (C) REFERENCE/DOCKET NUMBER: 600-1-087 CIP2I
     50
            (ix) TELECOMMUNICATION INFORMATION:
     52
                   (A) TELEPHONE: 201 487-5800
     53
                   (B) TELEFAX: 201 343-1684
     54
     55
                  (C) TELEX: 133521
```

ERRORED SEQUENCES

2828 (2) INFORMATION FOR SEQ ID NO: 99: (i) SEQUENCE CHARACTERISTICS:

Input Set : A:\PTO.RJ.txt

	2831 2832 2833			(I	3) TY	PE:	ami	0 ami no ac line	cid	acid	3			. 0	9		
	2835		(ii)	MOI	LECUI	E T	YPE:	pept	ide					_ `	1 1		
	2837		(v)	FR/	GME	T T	YPE:	N-te	ermin	nal							
E>											ID NO						
	2842	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro
	2843	1				5					10					15	
	2845	Arg	Gly	Ser	Pro												
	2846				20												

VERIFICATION SUMMARYDATE: 10/05/2005PATENT APPLICATION: US/08/485,943BTIME: 11:48:23

Input Set : A:\PTO.RJ.txt

```
L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:35 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:40 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:45 M:238 W: Alpha Fields not Ordered, Reordered [(C) CLASSIFICATION:] of (1)(vi)
L:436 M:220 C: Keyword misspelled or invalid format, [(A) DESCRIPTION:]
L:509 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:529 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9 L:571 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:651 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:673 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:695 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:717 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:830 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=21
L:1128 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29
L:1148 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30
L:1170 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:1192 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:1214 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33
L:1234 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:1255 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35
L:1276 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36
L:1297 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37 L:1339 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39
L:1362 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=40
L:1385 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=41
L:1407 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=42
L:1430 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43
L:1453 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=44
L:1474 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=45
L:1496 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=46 L:1519 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47
L:1541 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=48
L:1564 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=49
L:1587 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=50
L:1610 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=51
L:1633 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=52
L:1655 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=53
L:1678 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=54
L:1701 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=55
L:1724 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=56
L:1747 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=57
L:1770 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=58
L:1793 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=59
L:1816 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=60
L:1839 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=61 L:1862 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=62
L:1885 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=63
```

VERIFICATION SUMMARY

DATE: 10/05/2005 TIME: 11:48:23 PATENT APPLICATION: US/08/485,943B

Input Set : A:\PTO.RJ.txt

```
L:1907 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=64
L:1930 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=65
L:1953 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=66
L:1977 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=67
L:2000 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=68
L:2021 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=69
L:2044 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=70
L:2067 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=71
L:2090 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=72 L:2113 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=73
L:2136 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=74
L:2840 M:212 E: (34) Invalid or duplicate Sequence ID Number, Value=[98:]
```